

# FIC AT31 PCI/AGP SYSTEM BOARD BOARD LEVEL COMPATIBILITY TEST REPORT

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Supervisor	Tester

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## Revision History



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<b>Document Release</b>	<b>Date</b>	<b>Change Item</b>	<b>ECN</b>
Revision 1.00	6/17/2002	Initial Release.	



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## 1. Introduction

FIC's motherboards undergo a comprehensive suite of stringent software and hardware compatibility tests to ensure that they can not only run a complete range of operating systems and software packages, but that they can also be installed with a full selection of add-on cards and peripheral devices, such as AGP,VGA, SCSI, and network adapters as well as HDDs, FDDs, CD-ROM Drives and Fax/Modems. A board is deemed to have passed the compatibility testing suite when it has met the following criteria:



- All application software available for IBM compatible products works properly.
- All common internal and external hardware available to the IBM AT-Bus and PCI compatible systems functions properly.
- All hardware and software can be installed according to the instructions provided to the user.
- All legal configurations (IRQ , I/O addresses, DMA levels ) function properly.
- All applications have been tested with and without drivers provided on the support disk.
- All operating systems have been installed and tested with each processor, with and without the most critical mode selected by setup.



## 2. Mainboard Features

**Model Name** : AT31 PCB Rev 1.3  
**Product Name** : ATI A3 Based Mainboard  
**System BIOS** : Award BIOS Version TBA41  
**PCI IDE** : Internal PCI Mastre dual IDE  
**LPC** : VIA VT686B

## 3. Mainboard CPU Supports:

AMD Processors	Bus	Status
Duron 900MHz	100	Pass
Duron 950MHz	100	Pass
Duron 1.1GHz (Morgan)	100	Pass
Duron 1.3GHz (Morgan)	100	Pass
Athlon 900MHz	100	Pass
Athlon 950MHz	100	Pass
Athlon 1.1GHz	100	Pass
Athlon 1.133GHz	133	Pass
Athlon 1.3GHz	100	Pass
Athlon 1.333GHz	133	Pass
Athlon 1.4GHz	100/133	Pass
Athlon XP 1500+ (Palomino/1333)	133	Pass
Athlon XP 1600+ (Palomino/1400)	133	Pass
Athlon XP 1700+ (Palomino/1467)	133	Pass
Athlon XP 1700+ (Thoroughbred/1467)	133	Pass
Athlon XP 1800+ (Palomino/1533)	133	Pass
Athlon XP 1800+ (Thoroughbred/1533)	133	Pass
Athlon XP 1900+ (Palomino/1600)	133	Pass
Athlon XP 1900+ (Thoroughbred/1600)	133	Pass
Athlon XP 2000+ (Palomino/1667)	133	Pass
Athlon XP 2100+ (Palomino/1733)	133	Pass

- Socket A Fan-Sink : Please refer to AMD's Web side recommendation. Especially, over 850 MHz CPUs.



## 4. System Specification for Hardware and Software Utilities

The mainboard hardware portion was configured as follows :

Item	Description
System Core Logic	ATI A3 + VIA VT686B
System Cache	64/256K Pipeline Burst SRAM Built-in CPU
System Memory	DDR200/266(PC1600/2100) Support
	Maximum : 2GB DDR DRAM
	184 pins single RAS and Double RAS DDR SDRAM Module
System Slots	1 AGP and 3 PCI slots
Audio	VIA VT686B AC'97 Audio with Realtek ALC201A codec
LAN (Option)	Realtek RTL8100BL 10/100 LAN Chip Onboard
TV-Out (Option)	Onboard ATI A3 VGA TV-Out
LPC	VIA VT82C686B Support Normal,EPP,ECP mode and IR interface

### 4.1 Main Functionality :

Num.	M/B function	Result
1	ACPI Ready (support S0/S1/S3/S4/S5)	PASS
2	Wake On LAN / Wake On Ring	PASS
3	RTC Alarm Function	PASS
4	NOVUS II	BIOS Easy Kit
		BIOS Flash Protect (Guardian feature)
5	Ultra ATA-33/66/100 Enhanced IDE Interface	PASS
6	Onboard Realtek ALC201A AC'97 Audio	PASS
7	Onboard Realtek RTL8100BL LAN	PASS
8	USB 1.1 Function (Front/Rear)	PASS
9	Power Failure feature	PASS

### 4.2 Main Software Utilities :

Num.	M/B function	Version	Result
1	VIA 4 in 1 Chipset Driver	4.38	PASS
2	ATI A3 Video driver for Win 2000/XP	6.13.10.6064	PASS
3	ALC201A codec driver for Win 2000/XP	5.10.00.3850	PASS
4	Realtek RTL8100BL LAN driver for Win 2000/XP	5.503.412.2002	PASS
5	Award BIOS Flash ROM Utilities	8.10b	PASS



## 5. Jumper Function Verification

Description	Jumper Name	Default Option	Status
Power LED (Single color-2/3 pin)	LED	Open	Pass
Power LED (Dual color)	PW_LED	Open	Pass
IDE LED Connector	HD_LED	Open	Pass
Reset Switch	RST	Open	Pass
Remote Power Switch	PWR	Open	Pass
CPU FAN Connector	CPU_FAN	Open	Pass
Chipset FAN Connector	CHIP_FAN	Open	Pass
Clear CMOS	J3	1-2	Pass
IR interface	IR	Open	Pass
System Bus Clock (FSB)	J4/J5	2-3,2-3	Pass
CPU/DRAM Clock	J6/J7	OFF/ON	Pass
Front Audio Connector	FNT_AUD1	Open	Pass
COM2 Connector	COM2	Open	Pass
USB 2 Connector	USB2	Open	Pass
CD_IN Connector (RGGL)	CD_IN	Open	Pass
AUX_IN Connector	AUX_IN	Open	Pass
Wake On LAN	WOL	Open	Pass
Onboard TV Out Connector	VGA_TVOUT	Open	Pass



## 6. Stability Test

### 6.1 CPU Over Clock Test:

System Configuration	
<b>CPU</b> : AMD Athlon XP2000+ (1667MHz)	<b>FDD</b> : NEC FD1231T 1.44MB
<b>Cache Memory</b> : 256KB	<b>Audio</b> : Onboard Realtek ALC201A AC'97
<b>Memory</b> : Infineon DDR266 512MB X 2	<b>LAN</b> : Onboard Realtek 8100BL
<b>HDD (ATA/133)</b> : Maxtor 6L080J4 80GB	<b>Mouse</b> : Microsoft PS/2 mouse
<b>VGA</b> : Onboard ATI A3 AGP	<b>PowerSupply</b> : Enlight HPC-340-101 ATX 340W
<b>DVD-ROM</b> : Aopen DVD1648 16X DVD	<b>O.S. Environment:</b> Windows XP/Home Edition

NO.	Over clock level		Test Result				
	FSB	CPU ID	Cool boot	Install OS	S3	Winstone 2001	3D Mark2001
1	137MHz	1713MHz	Pass	Pass	Pass	52.0	1542

### 6.2 Stress Test:

System Configuration	
<b>CPU</b> : AMD Athlon XP 2000+ (1667MHz)	<b>FDD</b> : NEC FD1231T 1.44MB
<b>Cache Memory</b> : 256 K	<b>Audio</b> : Onboard Realtek ALC201A AC'97
<b>Memory</b> : Transcend DDR266 256MB x 2	<b>LAN</b> : Onboard Realtek 8100BL
<b>HDD 1(ATA/133)</b> : Maxtor 6L080J4 80GB	<b>Mouse</b> : Microsoft PS/2 mouse
<b>HDD2(ATA/100)</b> : Maxtor 4W100H6 100GB	<b>PowerSupply</b> : Enlight HPC-340-101 ATX 340W
<b>DVD-ROM</b> : Aopen DVD1648 16X DVD	<b>O.S. Environment:</b> Windows XP/Professional
<b>IDE ZIP</b> : Iomage ZIP 250	
<b>VGA</b> : Onboard ATI A3 AGP	

Test Result						
BIOS detect	Install OS	All driver install	PM	CC WS 2002	Stress burn in	DVD/VCD play
Pass	Pass	Pass	Pass	Pass	Pass	Pass

### 6.3 PCB Cool Boot Test: (12 hours)

System Configuration	
<b>CPU</b> : AMD Athlon XP 1900+ (1600MHz)	<b>FDD</b> : NEC FD1231T 1.44MB
<b>Cache Memory</b> : 256 K	<b>PowerSupply</b> : STR SPS-300W 300W
<b>Memory</b> : TakeMS DDR266 256MB x 2	
<b>VGA</b> : Onboard ATI A3 AGP	

Test Result	
Cool Boot (over 500 times)	Pass





## 7. Field (Stress) Test: Dynamic Burn-in Tests

Software Name	Duration	Result
CC Winstone 2002	12hr.	<i>Pass</i>
Test Configurations for Windows 2000	AMD Athlon 1400(FSB133) Maxtor 6L080J4 ATA/133 80GB HDD KingMax 256MB DDR DRAM Memory. X 2 Onboard ATI A3 AGP	
DVD Play	12hr.	<i>Pass</i>
Test Configurations for Windows ME	AMD Athlon XP 2000+(1667MHz) Maxtor 4d040k2 ATA/100 40GB HDD TwinMOS 256MB DDR DRAM Memory X 2 Onboard ATI A3 AGP	
3D Mark 2001 SE	12hr.	<i>Pass</i>
Test Configurations for Windows XP	AMD Athlon XP 2000+(1667MHz) Maxtor 4K040K2 ATA/100 40GB HDD KingSton 256MB DDR DRAM Memory X 2 Onboard ATI A3 AGP	



## 8. Hardware Compatibility Test Suite

### 8.1 Memory

#### Test Configuration:

OS Ver  Win XP Ver: 2002 .  
 CPU AMD Athlon XP 1900+(1600MHz)  AMD  
 HDD Maxtor 4W100H6 100GB IDE  ATA/100  ATA/133  
 Channel:  PM  PS  SM  SS  
 VGA ATI A3 AGP  Onboard  AGP 4X  
 CD-ROM Pioneer DVD-116 16X DVD Channel:  PM  PS  SM  SS  
 Sound Realtek ALC201A AC'97  PCL\_Slot:      On board  
 Mouse Microsoft IntelliMouse PS/2 Mouse  COM  PS/2

The following DDR DRAM module test CC Winstone 2001/Copy large files(over 500MB) under Windows XP with BIOS set up default value and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

#### DDR DRAM Module (DDR266/PC2100)

Vender	IC Part No.	Size	Side	Module No.
takeMS	MS25D12880S-7	256MB	D	MS64D32020U-7
NEC	D45D128842G5-C75-9LG	256MB	D	MC-45D32CD641KFA-C75
Apacer	NT5DS16M8AT-7K (Nayna)	256MB	D	77.10203.540
Transend	NT5DS16M8AT-7K (Nanya)	256MB	D	TS32MLD64V6D5
	V58C2128804SAT7 (Mosel)	256MB	D	TS32MLD64V6D5
Hynix	HY5DU28822AT-H (Hyundai)	256MB	D	HYMD132645 A8-H
KingMax	KDL684T4A2A-07A	128MB	S	MPDA82D-68KX2
	KDL684T4A2A-07A	256MB	D	MPDB62D-68KX2
Infineon	HYB25D256800AT-7	256MB	D	HYS64D32000GU-7-A
	HYB25D256800AT-7	512MB	D	HYS64D64020GU-7-A
Kingston	W942508AH-75 (Winbond)	256MB	S	KVR266X64C25/256
	W942508AH-75 (Winbond)	512MB	D	KVR266X64C25/512
SEITEC	DDR32M8AT-7	512MB	D	184DR512M638
elixir	N2DS12880AT-75B	256MB	D	M2U25664DS8HA0G-75B



## 8.2 Add-on Cards

### 8.2.1 Display Adapter Products

#### Test Configuration:

OS Ver  Win XP Ver: 2002 .

CPU AMD Athlon XP 2000+(1667MHz)  AMD

HDD Maxtor 4D040K2 40GB IDE  ATA/100  ATA/133  
Channel:  PM  PS  SM  SS

Memory TwinMos 256MB(Hynix) Total: 512 MB  PC1600  PC2100

CD-ROM LG DRD-8120B 12X IDE DVD Channel:  PM  PS  SM  SS

Sound Realtek ALC201A AC'97  PCI Slot:      On board

LAN Realtek RTL8100BL  PCI Slot:      On board

Mouse Logitech MouseMan Mouse  COM  PS/2

The following AGP VGA cards test 3Dmark 2001/Quick III Anera/Suspend to RAM(S3) under Windows XP with their respective VGA drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

### 4X AGP Display Adapter Products

Vendor	Model Name	Product Description	Driver version	Benchmark (3Dmark)
Leadtek	GeForce4 MX 400	A170 DDR	6.13.10.2832	3626
	GeForce4 MX 420	A170 TH	6.13.10.2832	3048
	GeForce4 Ti 4400	A250 TD	6.13.10.2832	5735
	GeForce4 Ti 4600	A250 Ultra TD	6.13.10.2832	5761
Matrox	MGA-G450	Millennium G450	5.12.01.1820	877
Creative	Riva Geforce2 GTS	3D Blaster Geforce2 GTS	6.13.10.2832	3140
Cardex	GeForce2 MX	GeForce2 MX	6.13.10.2832	2550
ATI	Radeon	All-In-Wonder Radeon	6.13.10.6071	3260
	Radeon 7500	Radeon 7500	6.13.10.6071	4300
	Radeon 8500 LE	Radeon 8500 LE	6.13.10.6071	6479
	ATI Radeon 8500	Radeon 8500	6.13.10.6071	6692
FIC	ATI Radeon 7500	AT008V (270MHz)	6.13.01.6015	3420
	ATI Radeon 7500	AT008V-L (230MHz)	6.13.01.6015	3254
	ATI Radeon 8500	AT008-275	6.13.01.6015	5600
ASUS	Riva TNT2 Pro	AGP-V3800 Pro	6.13.10.2880	1444
	GeForce2 MX	AGP-V7100	6.13.10.2880	2362
	Riva Geforce2 GTS	AGP-V7700	6.13.10.2880	3129
	GeForce2 Ti200	AGP-V7700 TI	6.13.10.2880	3060
	GeForce4 MX 400	AGP-V8170 DDR	6.13.10.2880	3252
	GeForce3 Ti200	AGP-V8200 T2 Deluxe	6.13.10.2880	4331
	GeForce3 Ti500	AGP-V8200 T5 Deluxe	6.13.10.2880	5163
	GeForce4 Ti 4400	V8440 /TD	6.13.10.2880	5011
Gainward	GeForce4 Ti 4600	V8460 Ultra /TD	6.13.10.2880	4988
	GeForce3 Ti200	GeForce3 PowerPack !!!	6.13.10.2832	4879
	GeForce4 MX 420	420T	6.13.10.2832	3052
	GeForce4 Ti 4400	4400XP	6.13.10.2832	5743
	GeForce4 Ti 4600	4600XP	6.13.10.2832	4998



ELSA	GeForce2 MX	GLADIAC MX	6.13.10.2832	2366
	GeForce2 Ti	GLADIAC 516TV-Out	6.13.10.2832	3268
	GeForce3 Ti200	GLADIAC 721TV-Out (64MB)	6.13.10.2832	4781
	GeForce3 Ti200	GLADIAC 721TV-Out (128MB)	6.13.10.2832	4341
	GeForce3 Ti500	GLADIAC 921 DVI	6.13.10.2832	4718
	GeForce4 Ti 4600	GLADIAC 925ViVo	6.13.10.2832	5001

## 8.2.2 SCSI Adapter Products

### Test Configuration:

**OS Ver**  Win XP Ver: 2002  
**CPU** AMD Athlon XP 2000+(1667MHz)  AMD  
**Memory** Elixir 256MB (Elixir) Total: 512 MB  PC1600  PC2100  
**VGA** ATI A3 AGP  Onboard  AGP 4X  
**HDD** Seagate ST-318406LW 18GB  Ultra II SCSI  Ultra Wide  
**CD-ROM** YAMAHA CRW2100S 40X CD-RW  Ultra SCSI  Ultra Wide  
**Sound** Realtek ALC201A AC'97  PCI\_Slot: \_\_  On board  
**LAN** Realtek RTL8100BL  PCI\_Slot: \_\_  On board  
**Mouse** Logitech MouseMan Mouse  COM  PS/2

The following PCI SCSI cards run Winstone 2001/Copy large files(over 500MB) under Windows XP with their respective SCSI drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

Vendor	Model Name	Product Description	Bus I/F
Adaptec	ASC-19160	Adaptec Ultra 160 PCI SCSI card 19160	PCI
	ASC-29160	Adaptec Ultra 160 PCI SCSI card 29160	PCI
	ASC-39160	Adaptec Ultra 160 PCI SCSI card 39160	PCI
Tekram	DC-390U2W	Tekram DC-390U2W PCI SCSI	PCI
	DC-390U3W	Tekram DC-390U3W PCI SCSI	PCI



### 8.2.3 PCI Modem Products

#### Test Configuration:

OS Ver  Win XP Ver: 2002 .

CPU AMD Athlon XP 2000+(1667MHz)  AMD

Memory Infineon 256MB(Infineon) Total: 512 MB  PC2700  PC2100

VGA ATI A3 AGP  Onboard  AGP 4X

HDD Maxtor 6L080J4 80GB  ATA/100  ATA/133

Channel:  PM  PS  SM  SS

CD-ROM Aopen DVD1648 16X IDE DVD Channel:  PM  PS  SM  SS

Sound Realtek ALC201A AC'97  PCI Slot:      On board

LAN Realtek RTL8100BL  PCI Slot:      On board

Mouse Microsoft IntelliMouse PS/2 Mouse  COM  PS/2

The following PCI modem card test includes connecting to the internet,download files and test S1/S3/S4 under under Windows XP with their respective modem drivers installed .

Vendor	Product Description	Bus I/F
Askey	1456VQH75	PCI
	1456VQH-R4 INT1	PCI

### 8.2.4 PCI Audio Products

#### Test Configuration:

OS Ver  Win XP Ver: 2002 .

CPU AMD Athlon XP 2000+(1667MHz)  AMD

Memory Transcend 256MB(Mosel) Total: 256 MB  PC1600  PC2100

VGA ATI A3 AGP  Onboard  AGP 4X

HDD Maxtor 6L080J4 80GB IDE  ATA/100  ATA/133

CD-ROM Aopen DVD1648 16X IDE DVD Channel:  PM  PS  SM  SS

Mouse Microsoft IntelliMouse PS/2 Mouse  COM  PS/2

The following PCI sound cards test play WAV/MIDI/CD audio and DVD under Windows XP with their respective sound drivers installed . (Onboard Audio set to Disabled on BIOS)

Vendor	Model Name	Product Description
Creative	CT-4790	Sound Blaster PCI512 Digital
	SB-0090	Sound Blaster Audigy Platinum



## 8.3 Storage

### 8.3.1 SCSI Peripheral Products

#### Test Configuration:

OS Ver  Win XP Ver: 2002.

CPU AMD Athlon XP 2000+(1667MHz)  AMD

Memory Elixir 256MB (Elixir) Total: 512 MB  PC1600  PC2100

VGA ATI A3 AGP  Onboard  AGP 4X

SCSI Adaptec ASC-39160 Ultra160  ISA  PCI Slot: 2.

Sound Realtek ALC201A AC'97  PCI Slot:    ,  On board

LAN Realtek RTL8100BL  PCI Slot:    ,  On board

Mouse Logitech First Mouse+ Mouse  COM  PS/2

The following SCSI devices test and WinStone 2001/Copy large files(over 500MB) under Windows XP with their respective SCSI drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

ITEM	Vendor	Model Name	Product Description
Hard Disk	IBM	COMP IEC-950	Ultra2 Wide 9.1GB
		COMP IEC-950	Ultra2 Wide 36GB
		DDRS-39130	UltraII SCSI HDD 9.1GB
		DDYS-T36950	Ultra2 Wide 36.7GB
	Seagate	ST-39173W	Barracuda 9LP Ultra Wide 9.1GB
		ST39236LW	Barracuda Ultra160 Wide 9GB
		ST318437LW	Barracuda Ultra160 Wide 18GB
		ST39204LW	Cheetah Ultra160 Wide 9GB
		ST318406LW	Cheetah Ultra160 Wide 18GB
		ST318452LW	Cheetah Ultra160 Wide 18GB
CD-ROM	Plextor	PX-40Tsi	Ultra SCSI CD-ROM 40X
		PX-W124Tsi	(32R12W4RW) CD-RW 32X
	Toshiba	XM-6210B	Ultra SCSI CD-ROM 32X
	Panasonic	CR-508	SCSI-II CD-ROM 24X
		LF-D291	SCSI-II 4.7GB DVD-RAM
	Afreedy	CD-2050S	Ultra SCSI CD-ROM 50X
	TEAC	CD-532S	Ultra SCSI CD-ROM 32X
		CDR 56S	(24R6W) CD-RW 24X
		CD-W512S-B82	(32R12W10RW) CD-RW 32X
	Nichimen	CDR-BP3N	(32R12W10RW) CD-RW 32X
	YAMAHA	CRW2100S	(40R16W10RW) CD-RW 40X
	MO	Gish	GF-640
Fujitsu		MDG3064SS	DYNA MO 640 SF
ZIP	Iomage		SCSI ZIP 250 (External)

**8.3.2 IDE Fixed Disk Drive Products****Test Configuration:**

OS Ver  Win XP Ver: 2002  
 Win 2000 Ver: 5.00.2195  
CPU AMD Athlon XP 1800+(1533MHz)  AMD  
Memory KingMax 256MB (KingMax) Total: 512 MB  PC1600  PC2100  
VGA ATI A3 AGP  Onboard  AGP 4X  
CD-ROM Actima AD16H 16X IDE DVD Channel:  PM  PS  SM  SS  
Sound Realtek ALC201A AC'97  PCI\_Slot:      On board  
LAN Realtek RTL8100BL  PCI\_Slot:      On board  
Mouse Logitech First Mouse+ Mouse  COM  PS/2

The following IDE devices test and CC WinStone 2002/Copy large files(over 500MB) under Windows XP/2000 with OS default drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

**IDE ATA/100**

Vendor	Model Name	Capacity
IBM	DTLA-307015	15.3GB
	DTLA-305020	20.5GB
	DTLA-307020	20.5GB
	DTLA-307030	30.7GB
	IC35L040AVER07-0	40GB
	DTLA-307045	46.1GB
	DTLA-307060	61.4GB
	IC35L060A	61.5GB
	DTLA-307075	76.8GB
Maxtor	51536H2	15.3GB
	52049H4	20.4GB
	53073H6	30.6GB
	34098H4	40.9GB
	54098H8	40.9GB
	4K040H2	40GB
	5T060H6	61GB
	98196H8	80GB
	4K080H4	80GB
	4W100H6	100GB
Seagate	ST320414A	20GB
	ST330631A	30.6GB
	ST340016A	40GB
	ST340810A	40GB
	ST340824A	40GB
	ST380020A	80GB
	ST380021A	80GB
WD	Caviar WD300BB	30GB
	Caviar WD400BB	40GB
	Caviar WD600BB	60GB
	Caviar WD800BB	80GB
	Caviar WD1000BB	100GB
	Caviar WD1200BB	120GB
Samsung	SV3063H	30.6GB



SV4084H

40.8GB

### 8.3.3 ATAPI CD-ROM /DVD-ROM Device Product

#### Test Configuration:

OS Ver  Win XP Ver: 2002  
 CPU AMD Athlon XP 1700+(1467MHz)  AMD  
 Memory Transcend 256MB (Nanya) Total: 512 MB  PC1600  PC2100  
 VGA ATI A3 AGP  Onboard  AGP 4X  
 HDD Maxtor 4W100H6 100GB IDE  ATA/100  ATA/133  
 Channel:  PM  PS  SM  SS  
 Sound Realtek ALC201A AC'97  PCI\_Slot:      On board  
 LAN Realtek RTL8100BL  PCI\_Slot:      On board  
 Mouse Logitech TrackmanMarble Mouse  COM  PS/2

The following IDE devices test play VCD or DVD/Copy large files(over 500MB) under windows XP with OS default drivers installed and set to the follow condition 1024 x 768 x 16bit colors, resolution refresh rate of 85Hz, small font.

#### 8.3.3.1 ATAPI CD-ROM:

Vendor	Model Name	Product Description
LITE-ON	LTN-403L	ATAPI CD-ROM 40X UDMA2
	LTN-485S	ATAPI CD-ROM 48X UDMA2
Acer	650P	ATAPI CD-ROM 50X UDMA2
AOpen	CD-952E/AKH	ATAPI CD-ROM 52X UDMA2
Creative	CD4833E	ATAPI CD-ROM 48X Mode4
ASUS	CD-S500/A	ATAPI CD-ROM 50X UDMA2
Mitsumi	FX5400W	ATAPI CD-ROM 54X Mode4
	CRMC-FX4820T	ATAPI CD-ROM 48X UDMA2
TEAC	CD-540E	ATAPI CD-ROM 40X UDMA2
YAMAHA		Audio Extractor 52X Mode4

#### 8.3.3.2 ATAPI DVD-ROM:

Vendor	Model Name	Product Description
ASUS	DVD-E612	ATAPI DVD-ROM 12X
	DVD-E616	ATAPI DVD-ROM 16X
SONY	DDU1211	ATAPI DVD-ROM 12X
	DDU1621	ATAPI DVD-ROM 16X
Pioneer	DVD-115	ATAPI DVD-ROM 16X
	DVD-116/2	ATAPI DVD-ROM 16X (UDMA66)
	DVD-105S	ATAPI DVD-ROM 16X
	DVD-106S/2	ATAPI DVD-ROM 16X (UDMA66)
Actima	AD16H	ATAPI DVD-ROM 16X
Panasonic	SR-8587-B	ATAPI DVD-ROM 16X
	LF-D211V	4.7GB DVD-RAM
Afreedy	DD-4010E	ATAPI DVD-ROM 10X
Creative	DVD1242E	ATAPI DVD-ROM 12X
LG	DRD-8120B	ATAPI DVD-ROM 12X
NEC	DV-5700B	ATAPI DVD-ROM 12X (UDMA33)
Aopen	DVD1648	ATAPI DVD-ROM 16X (UDMA66)
Lite-On	LTD-122	ATAPI DVD-ROM 12X





	LTD-163	ATAPI DVD-ROM 16X
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## 8.4 Peripherals

### 8.4.1 Parallel/Serial Port Products (Including IR)

**Test Configuration:**

OS Ver  Win XP Ver: 2002

CPU AMD Athlon XP 1600+(1400MHz)  AMD

Memory KingMax 256MB (KingMax) Total: 256 MB  PC1600  PC2100

HDD Seagate ST-340824A 40GB IDE  ATA/100  ATA/133

Channel:  PM  PS  SM  SS

CD-ROM Actima AD16H 16X IDE DVD Channel:  PM  PS  SM  SS

VGA ATI A3 AGP  Onboard  AGP 4X

Sound Realtek ALC201A AC'97  PCI\_Slot:      On board

Mouse Logitech TrackMan Marble Mouse  COM  PS/2

The following Parallel/Serial/IR devices be tested under Windows XP with OS default drivers installed.

Vendor	Product Description	Bus I/F
Iomega	Parallel ZIP250	LPT
HP	LaserJet 6P	LPT/IR
	DeskJet 840c	LPT
	DeskJet 990cxi	LPT
	DeskJet 1220c	LPT
EPSON	Stylus Color 740	LPT
	Stylus Color 900	LPT
WACOM	Intuos Graphics Tablet	COM
ELSA	MicroLink 56K Internet	COM
Logitech	WingMan Formula Force joystick	COM
Kodak	DC210 InfraRed/Serial port Digital camera	COM
ACTisys	ACT-IR210L Receiver/Transceiver	IR

### 8.4.2 Mouse Products

**Test Configuration:**

OS Ver  Win ME Ver: 4.90.3000

CPU AMD Athlon XP 1700+(1467MHz)  AMD

Memory Transcend 256MB (Nanya) Total: 256 MB  PC1600  PC2100

HDD IBM IC35L040A 40GB IDE  ATA/100  ATA/133

Channel:  PM  PS  SM  SS

CD-ROM ASUS CD-S500/A 50X IDE Channel:  PM  PS  SM  SS

VGA ATI A3 AGP  Onboard  AGP 4X

Sound Realtek ALC201A AC'97  PCI\_Slot:      On board

LAN Realtek RTL8100BL  PCI\_Slot:      On board

The following Mouse devices test Office XP and Game under Windows XP with Mouse drivers installed.

Vendor	Product Description	Bus I/F
Microsoft	Optical U/P Mouse (X05-48976)	USB/PS2



	Optical U/P Mouse (X06-25122)	USB/PS2
	Explorer 3.0 U/P Mouse (X06-25120)	USB/PS2
	TrackBall Explorer 1.0 U/P Mouse (X05-87473)	USB/PS2
Logitech	MouseMan (M-CV46)	COM/PS2
	MouseMan Dual Optical (M-BL63B)	COM/PS2
eMachines	M-S34 (Logitech)	PS2
Samsung	Cyber Beetle Mouse (Optical)	PS2
Genius	NetScroll Optical	PS2
	NetScroll+ Eye Optical	PS2
	NetScroll+ NB Eye Optical	USB/PS2
LEO	Niche-N202	PS2

### 8.4.3 USB Device Products

#### Test Configuration:

OS Ver  Win XP Ver: 2002 .

CPU AMD Athlon XP 1800+(1533MHz)  AMD

Memory NEC 256MB (NEC) Total: 512 MB  PC1600  PC2100

HDD Seagate ST-380020A 80GB IDE  ATA/100  ATA/133

Channel:  PM  PS  SM  SS

CD-ROM Actima AD16H 16X IDE DVD Channel:  PM  PS  SM  SS

VGA ATI A3 AGP  Onboard  AGP 4X

Sound Realtek ALC201A AC'97  PCI\_Slot:      On board

Mouse Logitech First Mouse+ Mouse  COM  PS/2

The following USB devices be tested under Windows XP with Win XP default driver installed.

Type	Vendor	Description
Mouse	Logitech	USB Wheel Mouse (M-BB48)
		USB MouseMan Wheel (M-BA47)
		USB Wheel Mouse (Optical) (M-BD58)
		MouseMan Dual Optical (M-BL63B)
	Microsoft	IM Optical U/P Mouse (X05-48976)
		IM Optical U/P Mouse (X06-25122)
		IM Explorer 3.0 U/P Mouse (X06-25120)
		TrackBall Explorer U/P Mouse (X05-87473)
		Wireless Explorer USB Mouse (X08-12616)
Cypress	7-895 Mouse	
HUB	Belkin	Express Bus F5U001
	SOHOUSB	Unique Energy Saving (4-Port USB Hub)
Camera	Intel	YC72
	Kodak	DVC323
	IBM	XVP610
Keyboard	BTC	8113W
	Jetime	ACK-298H
	Microsoft	Natural Keyboard Pro
Printer	HP	DeskJet 840c
		DeskJet 990cxi



		DeskJet 1220c
	EPSON	Stylus Color 740
		Stylus Color 900
Scanner	EPSON	GT-7000
		Perfection 2450 Photo
	HP	ScanJet 4200C
Ethernet	CATC	USB Ethernet Link
Speaker	YAMAHA	YST-MS35D
MO	OLYMPUS	Turbo MO MINI (MOS3390S)
HDD (Adapter)	Vipower	VP-8058 Mobile USB Adapter
		VP-8258 Mobile USB Adapter
ZIP	iomega	ZIP 250
CD-RW	SONY	Spressa CD-ReWritable Recorder
	Plextor	PX-S88TU (24R8W8RW)
	YAMAHA	CRW-70 (24R12W8RW)
FDD		Generic USB FDD
Flash H_ Disk	TREK	ThumbDrive USB Flash Hard Disk
GamePad	Creative	Cobra USB GamePad
	Logitech	WingMan Extreme USB GamePad
	Microsoft	SideWinder Strategic Commander
	Microsoft	SideWinder Game Voice
Joystick	Logitech	WingMan Formula Force joystick
	Microsoft	SideWinder Precision 2



## 8.5 Power Supply Products

### Test Configuration:

OS Ver  Win XP Ver: 2002  
 CPU AMD Athlon XP 1900+(1600MHz)  AMD  
 Memory TakeMS 256MB (TakeMS) Total: **512 MB**  PC1600  PC2100  
 HDD WD Caviar WD300BB 30GB IDE  ATA/100  ATA/133  
 Channel:  PM  PS  SM  SS  
 CD-ROM SONY DDU1211 12X IDE DVD Channel:  PM  PS  SM  SS  
 VGA ATI A3 AGP  Onboard  AGP 4X  
 Sound Realtek ALC201A AC'97  PCI Slot:      On board  
 Mouse Logitech TrackMan Marble Mouse  COM  PS/2

The following Power supply devices test Cool/Warm boot, restart and power management under Windows XP with over 5 times.

Vendor	Product Description	Power	Input Voltage	Type
DELTA	DPS-200PB-103D	200W	110/220	ATX
	DPS-200PB-103F	200W	110/220	
	DPS-250KB-3 A	250W	110/220	
	DPS-300KB A	300W	110/220	
	DPS-300KB-1 A	300W	110/220	ATX
Seventeam	ST-250BLP	250W	110/220	ATX
	ST-250BLV	250W	110/220	ATX
	ST-250GL	250W	110/220	ATX
	ST-300BLV	300W	110/220	ATX
	ST-301HR	300W	110/220	ATX
	ST-400GL	400W	110/220	ATX
Enlight	HPC-250-101 Rev:C	250W	110/220	ATX
	HPC-300-101 Rev:C0	300W	110/220	ATX
	HPC-340-101	340W	110/220	ATX
HIPRO	HP-250 NLXAK Rev:01	250W	110/220	ATX
	HP-250 NLXAA	250W	110/220	ATX
	HP-300SN Rev:02	300W	110/220	ATX
TELTA	HI-250PB	250W	110/220	ATX
	HI-300PB	300W	110/220	ATX
AOpen	FSP300-60GT	300W	110/220	ATX
FSP	FSP250-61GN	250W	110/220	ATX
ILSSAN	ISP 250	250W	110/220	ATX
ENERMAX	EG301P-VE	300W	110/220	ATX
Seasonic	SS-250FS	250W	110/220	ATX
	SS-300FS	300W	110/220	ATX
ICute	P4-3000TC v2.03	300W	110/220	ATX
L&C	LC-A250ATX	250W	110/220	ATX
Good Vision	XP-375X	375W	110/220	ATX
Green An	ATX-1125BTA	300W	110/220	ATX
	ENP-0735	350W	110/220	ATX
Adiance	PSIV-350-1 V2.03	350W	110/220	ATX
SD	SD-300W-12V	300W	110/220	ATX
HOPELY	ATX-250SE-P4	250W	220	ATX
	ATX-300SE-P4	300W	220	ATX



	ATX-300S	300W	220	ATX
BELSON	BS-7230H	230W	220	ATX
	BS-2000	200W	220	ATX
Golden Field	K7-335 V2.02	300W	220	ATX
	ATX-310WB v2.03	300W	220	ATX
	ATX-320WB&P4	300W	220	ATX
? ? CG	300PA	300W	220	ATX
? ? QY	QY-300T	300W	220	ATX
? ? ? ?	ST-ATX325	300W	220	ATX
STR	SPS-300W Rev:03	300W	220	ATX



## 9. Software Compatibility Test Suite

### 9.1 Base Operating System

#### 9.1.1 Microsoft Windows XP/Home Edition:

##### Test Configuration:

CPU	AMD Athlon XP 1800+(1533MHz)	<input checked="" type="checkbox"/> AMD
Memory	KingMax 256MB(KingMax)	Total: 512 MB <input type="checkbox"/> PC1600 <input checked="" type="checkbox"/> PC2100
HDD	Maxtor 6L060J3 60GB IDE	<input type="checkbox"/> ATA/66 <input type="checkbox"/> ATA/100 <input checked="" type="checkbox"/> ATA/133
		Channel: <input checked="" type="checkbox"/> PM <input type="checkbox"/> PS <input type="checkbox"/> SM <input type="checkbox"/> SS
VGA	ATI A3 AGP	<input checked="" type="checkbox"/> Onboard <input type="checkbox"/> AGP 4X
Sound	Realtek ALC201A AC'97	<input type="checkbox"/> PCI_Slot: __ <input checked="" type="checkbox"/> On board
CD-ROM	Pioneer DVD-116 16X IDE DVD	Channel: <input type="checkbox"/> PM <input type="checkbox"/> PS <input checked="" type="checkbox"/> SM <input type="checkbox"/> SS
LAN	Realtek RTL8100BL	<input type="checkbox"/> PCI_Slot: __ <input checked="" type="checkbox"/> On board
Mouse	Microsoft IntelliMouse Mouse	<input type="checkbox"/> COM <input checked="" type="checkbox"/> PS/2

Test Item	Result	Remark
Install Win XP with NTFS (boot from CD )	PASS	
FIC CD-PRO all M/B drivers Install & Test	PASS	
FIC CD-PRO all Application Install & Test	PASS	
FIC CD-Plus V2.0 Auto run test	PASS	
Device Management check (No Caution)	PASS	
Large file Copy from CD/DVD-ROM (Over 500MB)	PASS	
Install Office XP	PASS	
Media Player 8.0 (play MIDI/MP3/CD Audio)	PASS	
Defrag test	PASS	
DVD play (name: <i>Deep Blue Sea</i> )	PASS	
Power Management (Stand By function)	Power button	PASS
	Keyboard Sleep Key	PASS
	Start → Stand By item	PASS
	Time Out	PASS
S3 (Suspend To Memory)	Power button	PASS
	Keyboard Sleep Key (98keyboard)	PASS
	Start → Stand By item	PASS
	Time Out	PASS
Hibernate (Suspend To Disk)	Power button	PASS
	Start → Hibernate item	PASS
	Time Out	PASS
System Shutdown	Power button	PASS
	Start → Shut down item	PASS
CC WinStone 2002	PASS	22.7
WinStone 2001 V1.02	PASS	42.0

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
MS Windows XP / Home Edition	2002	English	Microsoft	Pass



**9.1.2 Microsoft Windows 2000 + Service Pack 2:**

**Test Configuration:**

**CPU** AMD Athlon XP 2000+(1667MHz)  AMD  
**Memory** KingMax 256MB(KingMax) **Total: 512 MB**  PC1600  PC2100  
**HDD** WD Caviar WD1000BB 100GB IDE  ATA/66  ATA/100  ATA/133  
**Channel:**  PM  PS  SM  SS  
**VGA** ATI A3 AGP  Onboard  AGP 4X  
**Sound** Realtek ALC201A AC'97  PCI\_Slot: \_\_.  On board  
**CD-ROM** Panasonic SR-8587-B 16X IDE DVD **Channel:**  PM  PS  SM  SS  
**LAN** Realtek RTL8100BL  PCI\_Slot: \_\_.  On board  
**Mouse** Microsoft IntelliMouse Mouse  COM  PS/2

Test Item	Result	Remark
Install Win 2000 with NTFS (boot from CD )	PASS	
Format FDD	PASS	
FIC CD-PRO all M/B drivers Install & Test	PASS	
FIC CD-PRO all Application Install & Test	PASS	
Device Management check (No Caution)	PASS	
VGA Resolution/Color change	PASS	
Large file Copy from CD/DVD-ROM (Over 500MB)	PASS	
Install Office XP	PASS	
DVD play (name: <i>Deep Blue Sea</i> )	PASS	
Power Management (Stand By function)	Power button	PASS
	Keyboard Sleep Key	PASS
	Start → Stand By item	PASS
	Time Out	PASS
S3 (Suspend To Memory)	Power button	PASS
	Keyboard Sleep Key (98keyboard)	PASS
	Start → Stand By item	PASS
	Time Out	PASS
Hibernate (Suspend To Disk)	Power button	PASS
	Start → Hibernate item	PASS
	Time Out	PASS
System Shutdown	Power button	PASS
	Start → Shut down item	PASS
CC WinStone 2002	PASS	23.7
WinStone 2001 V1.02	PASS	44.6

The board is tested to ensure that it runs a complete a range of Operating Systems and thus operate in all network environments The board Power Management and Remote functions are also tested.

Operating System	Version	Language	Company	Status
MS Windows 2000 Professional	5.00.2195	English	Microsoft	Pass
Windows 2000 Service Pack	2.0	English	Microsoft	Pass





**Test Engineer:**

**BIOS:**     *Benson Shen*    

**OS:**     *Kai Dane*    

**I/O :**     *Leon Liang*    

**Audio:**     *Lion Liou*    

**CPU:**     *Stevent Huang*    

**VGA:**     *Scott Lin*    

**Memory:**     *Kevin Lin*    

**IDE Devices:**     *Kai Dane*    

**Check by:**     *Lion Liou*    

**Ownership:**     *Benson Shen*